

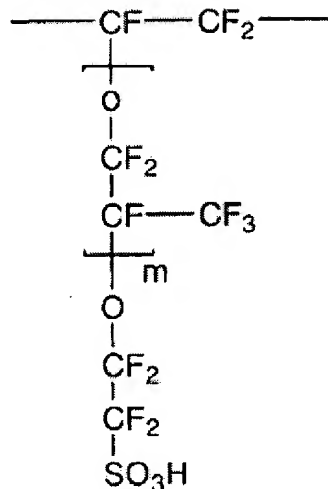
ATTACHMENT A
Remarks

Claims 30-36, 38-40, 46 and 49-52 are pending in the present application. By this Amendment, Applicants have amended claims 30, 46, 49 and 51, and canceled claims 45, 47 and 48. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

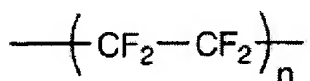
Claims 30, 35-36 and 38-40 were rejected under 35 U.S.C. § 102(e) as being anticipated by Cisar (U.S. Patent No. 6,492,431) (hereinafter "Cisar '431") and Cisar (U.S. Patent No. 5,635,039) (hereinafter "Cisar '039") (collectively "Cisar"). By this Amendment, Applicants have amended claim 30 to include the subject matter recited in claims 45 and 47, which previously depended from claim 30 and were not subject to the 35 U.S.C. § 102(b) rejection. Accordingly, claim 30 (currently amended) is not anticipated by Cisar '431 or Cisar '039. Similarly, claims 35, 36 and 38-40, which depend from claim 30, are not anticipated by Cisar '431 or Cisar '039.

Claims 45-52 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cisar '431 or Cisar '039. In the "Response to Arguments" section, the Examiner alleges that Cisar '431 clearly meets the requirements of Applicants' previously presented, amended claims. The Examiner asserts that the partial structures A and B of the polymer in Cisar '431, shown below, read on or anticipate the previously recited segments A and B, respectively.

Partial structure A:



Partial structure B:



Applicants respectfully submit that the combined subject matter of claims 45 and 47, now present in claim 30 (currently amended), is further distinguishable from the Cisar '431 and Cisar '039 polymers, since partial structure A (Cisar) does not have the now recited ethylenic fluoromonomer (b), containing no sulfonic acid functional groups defined in claim 30 (currently amended). It should be noted that an ethylenic structure in Cisar's partial structure A is only $>(\text{CF}-\text{CF}_2)-$ and $-\text{[O}-\text{CF}_2-\text{CF}(\text{CF}_3)]-$, neither of which is an ethylenic structure. Therefore, claim 30 (currently amended) is distinguishable from the polymer in Cisar '431 based on the recited ethylenic fluoromonomer (b).

Furthermore, claim 30 is distinguishable from Cisar '431 and Cisar '039 based on the recited molecular weight of segment B.

In addition, although the Examiner asserts that Cisar '431 states that membrane may be blended, as well as alternating blocks of each type of segment described, citing

Cisar '431, column 7, lines 15-30 and column 7, line 15 to column 8, line 15 in the Office Action, Cisar '431, column 7, lines 15-30 refers to the membranes fabricated by blending. It should be noted that the disclosure of Cisar '431 is divided into several distinct sections or aspects of its invention, where one aspect starts on column 6, line 54 and a next aspect starts on column 7, line 30. The former aspect relates to a process of fabricating a membrane by blending (see column 6 lines 54-59). It is respectfully submitted that the rejection appears to be hindsight based on such misinterpretation.

With respect to Cisar '431, column 7, line 30 to column 8, line 15, this begins with the phrase "A further aspect of the invention provides a process of co-polymerizing two or more monomers to form a co-polymer chain molecule which may be fabricated into a composite membrane." However, it is respectfully submitted that the process disclosed by Cisar '431 fails to make obvious the present invention of claim 30 (currently amended), since the processes disclosed in Cisar '431, column 7, line 46 to column 8, line 5, which includes steps (a) to (c) and, optionally, (d) and (e), are not able to produce the multi-segmented fluoropolymer, block copolymer or graft copolymer, as defined in claim 30 (currently amended).

Cisar '431 states that:

One method of copolymerization that may be used in the processes of the invention comprises:

- (a) initiating a radical polymerization process using a monomer not amenable to derivatization or functionalization as the only monomer;
- (b) allowing the polymerization to proceed to form chains or blocks of a desired length; and

(c) adding a substantial amount of one or more additional monomers and continuing the polymerization to produce segments or blocks on the same polymer chains...."

(Cisar, column 7, lines 46-55.)

Therefore, when a monomer, indicated as "A", is used in Cisar step (a), which includes "radical polymerization", a produced polymer is "-AAAAAAAAAAAAA-".

Further, when another monomer, indicated as "B", is used in Cisar step (c), which includes "the polymerization", i.e. radical polymerization, a produced polymer is only, e.g., "-BABBBABBBBABBBAB-" and results in providing the mixture of polymers indicated as "-AAAAAAAAAAAAA-" and "- BABBBABBBBABBBAB-".

It is respectfully submitted that Cisar step (c) would not provide a block type polymer indicated as "-AAAAAAAAAAAAA-BBBBBBBBBBBB-", since the radical polymerization is not a monomer selective reaction and Cisar step (b) is ambiguous. Therefore, Cisar fails to teach or suggest the claimed block polymer.

Furthermore, Cisar '431 and '039 do not illustrate polymers other than blended polymers.

Moreover, Cisar '431 and Cisar '039 do not disclose:

- (1) a segment having a crystalline melting point of 10,000 or higher or a glass transition point of 100°C or higher, and
- (2) a molecular weight of segments, as claimed.

Based on the foregoing, Applicants respectfully submit that all pending claims are clear of the prior art.

In view of the foregoing, Applicants respectfully submit that the present application is in condition for allowance.

END REMARKS